ABSTRACT OF THE DISCLOSURE

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A data construct referred to as a semcard is described. A semcard is a semantic (meaning-based) software object comprised of semantic meta-tags and meta-data that describes a target object or thing. A target object can be any type of digital or physical entity or identifier, or it can be tacit knowledge, such as ideas, concepts, processes or other data existing in a user's mind, provided that the user represents this knowledge in the semcard. A semcard also embodies information about its own structure – rules, history, state, policies and goals regarding automation, display, access permissions, sharing and other operations of the semcard and any optional target object, which may be contained within the semcard or be external to it. It can also represent a semantic link between two semcards, or between a semcard and its referent target.

A collection of semcards represents a knowledge network; single semcards, as well as knowledge networks, can be browsed, shared, searched, disseminated, manipulated, displayed, organized, and stored as desired by the individual users of the semcard or knowledge network having a semcard management application or browsing software on their computational devices. Semcards can also represent relationships between users or, more generally, people and entities. A relationship semcard stores information relevant to a relationship and an invitation semcard is used to initiate a relationship. Semcards hold metadata, policies, and automation instructions about a relationship and, combined with a comparison mechanism, enable the enforcing application to control numerous aspects of the relationship thus represented, including which users can send the intended recipient data and what type of data the intended recipient has agreed to accept.